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PATENT REISSUE APPLICATION Docket No. 11527.209.2

> Art Unit 1771

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Per Just Andersen, Ph.D., et al.

, ,

Serial No. 09/390,583

n re reissue application of

Filed:

September 2, 1999

For: COATED STARCH-BASED COMPOSITIONS

AND METHODS FOR MANUFACTURING

STARCH-BASED COMPOSITIONS

Examiner: Blaine R. Copenheaver

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DECLARATION UNDER 37 C.F.R. § 1.175(b)(1) IN SUPPORT OF REISSUE APPLICATION

1. We, Per Just Andersen, Ph.D., and Simon K. Hodson (hereinafter "Inventors"), declare that we are the original and sole inventors named in previously filed U.S. application Serial No. 08/327,524, filed October 21, 1994, which issued as U.S. Patent No. 5,662,731 on September 2, 1997, and for which this application for reissue is sought. We further declare that we are citizens of the Kingdom of Denmark and the United States of America, respectively, and have residences and post office addresses at 947 Via Fruteria, Santa Barbara, California 93110 and 4621 Via Roblada, Santa Barbara, California, 93110, respectively. We believe ourselves to be the original, first, and joint inventors of the subject matter of the invention or discovery set forth in said U.S. application Serial No. 08/327,524, which issued as said U.S. Patent No. 5,662,731, and which is the subject of U.S. reissue application Serial No. 09/390,583.



- 2. E. Khashoggi Industries, LLC (hereinafter "Assignee"), by and through its President, Simon K. Hodson, declares that it is the assignee of the entire right, title and interest in and to U.S. Patent No. 5,662,731, which issued from U.S. application Serial No. 08/327,524, as evidenced by the assignment documents recorded at reel 7371, frame 813 (original assignment from Inventors to original assignee E. Khashoggi Industries) and reel 8761, frame 333 (assignment from E. Khashoggi Industries to E. Khashoggi Industries, LLC). Assignee hereby consents to the filing of reissue application Serial No. 09/390,583 for the reissue of U.S. Patent No. 5,662,731.
- 3. The Inventors and Assignee together constitute the "Applicants" of this application for reissue. Applicants have reviewed the aforementioned assignment documents and believe that title is in Assignee seeking to take action.
- 4. Applicants acknowledge the ongoing duty to disclose information which is material to the examination of this reissue application in accordance with Section 1.56(a) of Title 37 of the Code of Federal Regulations.
- 5. Applicants believe that U.S. Patent No. 5,662,731 is wholly or partly inoperative by reason of Applicants having claimed less than what Applicants had the right to claim.
- 6. Every error in the patent which has been corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the Applicants.
- 7. Applicants, when drafting and filing the original claims, and when drafting and filing subsequent amendments during prosecution, sought to protect what they considered to be their invention. In particular, Applicants received protection for a starch-based composition as recited in issued claim 1, which reads as follows:

- 1. A starch-based composition for molding into an article having a starch-bound cellular matrix, the starch-based composition comprising water, a starch-based binder in a concentration greater than about 20% by weight of the starch-based composition, and a fibrous material having an average fiber length greater than about 2 mm and an aspect ratio greater than about 10:1, wherein the fibers are substantially homogeneously dispersed throughout the starch-based composition, wherein the starch-based binder includes a substantially ungelatinized component comprising unmodified starch granules in an amount in a range from about 50% to about 90% by weight of the starch-based binder and a substantially gelatinized component comprising gelatinized starch in an amount in a range from about 10% to about 50% by weight of the starch-based binder prior to molding the composition into the article.
- 8. The fiber length limitation was included to approximately describe the ability of the fibers to strengthen the resulting molded composition. It was originally believed that the foregoing claim with the recited fiber length limitation, as well as the other claims of U.S. Patent No. 5,662,731, adequately protected the invention for which patent protection was sought.
- 9. Subsequent to the issuance of U.S. Patent No. 5,662,731, Applicants considered whether claiming the disclosed composition as a fiber-reinforced composite composition that includes two distinct regions, namely a first region comprising a starch-based binder that is at least partially solidified and a second region comprising a coating composition, would better protect Applicants' invention.
- 10. Applicants realized that an infringer could theoretically circumvent the invention disclosed in U.S. Patent No. 5,662,731 and avoid literal infringement of the claims in view of the unnecessarily restrictive fiber length limitation recited in the issued claims, which is not necessary for patentability and which is not the best way to claim the functional aspect of including fibers to increase the strength of the composite composition.
- 11. Therefore, since the claims of U.S. Patent No. 5,662,731 do not claim this inventive fiber-reinforced composite composition, but unnecessarily restrict the length of the fibers, they do



not adequately claim the invention. For this reason, the claims that issued in U.S. Patent No. 5,662,731 are at least partially inoperative.

- 12. Applicants failed to appreciate the inventive nature of using the coating compositions disclosed in U.S. Patent No. 5,662,731 to form novel fiber-reinforced composite compositions as now recited in the reissue claims, even though the Inventors were clearly in possession of this invention at the time the application was filed, as indicated by the disclosure.
- 13. Only after issuance of U.S. Patent No. 5,662,731 did Applicants realize that Applicants could have claimed the novel fiber-reinforced composite compositions as now recited in the reissue claims.
- 14. If, during the pendency of U.S. application Serial No. 08/327,524, Applicants had fully understood their right to claim the composite compositions recited in the claims as now presented, Applicants could have sought protection for this invention, either instead of the claims that were actually issued or in a continuation application that could have been filed during the pendency of said U.S. application Serial No. 08/327,524.
- 15. In addition to the broadening aspect of removing the minimum fiber-length limitation, the reissue claims "are materially narrower in other overlooked aspects of the invention," namely, with respect to the express recitation of the strengthening function of the fibers as well as the recitation of a coating composition.
- 16. We declare further that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States



Code and that such willful, false statements may jeopardize the validity of the reissue application or any patent issuing thereon.

Signed at Santa Barbara, California this 12 day of December 2001.

Inventor:

Per Just Andersen 947 Via Fruteria

Santa Barbara, California 93110

Signed at Santa Barbara, California this 12th day of December 2001.

Inventor:

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Signed at Santa Barbara, California this 12th day of December 2001.

E. Khashoggi, Industries LLC (Assignee)

By:

imon K. Hodson

President

JMG:cm

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1. 5,662,731, Sep. 2, 1997, Compositions for manufacturing fiber-reinforced, starch-bound articles having a foamed cellular matrix, Andersen, Per Just, Santa Barbara, California Hodson, Simon K., Santa Barbara, California, E. Khashoggi Industries, Santa Barbara, California (02), Date Transaction Recorded: Oct. 29, 1997 MERGER (SEE DOCUMENT FOR DETAILS). E. KHASHOGGI INDUSTRIES, LLC. 800 MIRAMONTE DRIVE SANTA BARBARA, CALIFORNIA 93109-141 Reel & Frame Number: 8761/0333

CORE TERMS: binder, moldable, starch, aggregate, matrix, viscosity, composition, solvent, coating, particle...

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LEVEL 1 - 1 OF 1 PATENT

5,662,731

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Sep. 2, 1997

Compositions for manufacturing fiber-reinforced, starch-bound articles having a foamed cellular matrix

REISSUE: Reissue Application filed Sep. 2, 1999 (O.G. Nov. 16, 1999) Ex. Gp.: 1755; Re. S.N. 09/390,583

CORE TERMS: binder, moldable, starch, aggregate, matrix, viscosity, composition, solvent, coating, particle...

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1/1 LGST - (C) LEGSTAT
Patent Number -US 5662731 [US5662731]
Application Number -US 327524/94 19941021 [1994US-0327524]
Document Type -US-P
Action Taken -19941021 US/AE-A
APPLICATION DATA (PATENT)
{US 327524/94 19941021 [1994US-0327524]}
-19950323 US/AS02
ASSIGNMENT OF ASSIGNOR'S INTEREST
E. KHASHOGGI INDUSTRIES 800 MIRAMONTE DRIVE SANTA
BARBARA, CA 93109 * ANDERSEN, PER JUST : 19941103;
HODSON, SIMON K. : 19941103
-19970902 US/A
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REISSUE APPLICATION FILED 19990902

-19991116 US/RF

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-199946-001417

Patent Number -5662731 A [US5662731]
Official Gazette Dat-1999-11-16
Actions -REISSUE APPLICATION FILED